

117TH CONGRESS  
1ST SESSION

# S. 1068

To direct the Occupational Safety and Health Administration to issue an occupational safety and health standard to protect workers from heat-related injuries and illnesses.

---

IN THE SENATE OF THE UNITED STATES

APRIL 12, 2021

Mr. BROWN (for himself, Mr. PADILLA, Mr. MERKLEY, Ms. WARREN, Ms. CORTEZ MASTO, and Ms. BALDWIN) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

---

## A BILL

To direct the Occupational Safety and Health Administration to issue an occupational safety and health standard to protect workers from heat-related injuries and illnesses.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE AND FINDINGS.**

4       (a) SHORT TITLE.—This Act may be cited as the  
5       “Asuncion Valdivia Heat Illness and Fatality Prevention  
6       Act of 2021”.

7       (b) FINDINGS.—Congress finds the following:

1                   (1) Excessive heat exposure poses a direct  
2 threat to workers and the economy. Climate change  
3 increases this danger, as 19 of the 20 hottest years  
4 on record have occurred since 2001. Rising tempera-  
5 tures are projected to cause an increase in heat-re-  
6 lated workplace injuries and illnesses, a dramatic  
7 loss in labor capacity, and decreased productivity.

8                   (2) On average, 3 times as many people die  
9 from extreme heat in the United States each year  
10 than from hurricanes, floods, and tornadoes com-  
11 bined.

12                  (3) Heat-related illnesses can arise when high  
13 temperatures rise above the capacity of the body to  
14 dispel heat. Impacts range from comparatively minor  
15 problems such as heat cramps to severe afflictions  
16 such as organ damage, heat exhaustion, stroke, and  
17 death.

18                  (4) Heat stress and COVID–19 are individually  
19 dangerous to workers and can interact, making some  
20 work environments especially hazardous. Respiratory  
21 infections, such as COVID–19, and the use of pro-  
22 tective equipment, like face and skin coverings, can  
23 increase susceptibility to heat exhaustion and heat  
24 stroke. Moreover, the symptoms of heat stress and  
25 respiratory illnesses may overlap in ways that exac-

1 erbate the diagnosis and pathophysiology related to  
2 these potentially fatal conditions.

3 (5) The current scientific evidence, rate of vac-  
4 cine production and distribution, racial and socio-  
5 economic inequities in vaccine access, mistrust of  
6 science messengers, and levels of international and  
7 national preparedness, indicate it will take months  
8 to years to achieve herd immunity from COVID–19.  
9 Moreover, only long-term study will reveal if vaccines  
10 sufficiently protect communities from all strains of  
11 this coronavirus. Accordingly, workplaces must con-  
12 tinue to guard against COVID–19 and other com-  
13 municable illnesses well into the future, especially in  
14 high-density workplaces that expose employees to  
15 stressors that include unhealthy levels of heat.

16 (6) Jobs at highest risk of heat stress illness  
17 and death are disproportionately held by Black and  
18 Brown workers, a disparity that reflects the racial  
19 injustice inherent in our economic system.

20 (7) Farmworkers and construction workers suf-  
21 ffer the highest incidence of heat illness, but all out-  
22 door and indoor workers employed in excessively hot  
23 and humid environments are at significant risk of  
24 material impairment of health or functional capacity.

1                         (8) Asuncion Valdivia was a California farm-  
2 worker who died of heat stroke in 2004 after picking  
3 grapes for 10 straight hours in 105 degree tempera-  
4 tures. Instead of calling an ambulance, his employer  
5 told his son to drive Mr. Valdivia home. On his way  
6 home, he started foaming at the mouth and died.

7                         (9) While heat stress is often associated with  
8 outdoor jobs, some indoor workers are also at risk  
9 from dangerously high temperatures. Indoor heat  
10 stress is prevalent in enclosed workplaces without  
11 climate control or adequate ventilation, such as  
12 warehouses and factories, and workplaces with heat-  
13 generating machinery such as steel mills, electrical  
14 utilities, bakeries, commercial kitchens, and laun-  
15 dries.

16                         (10) People working in excessive heat suffer di-  
17 minished mental acuity and physical ability, which  
18 increases the risk of accidents. Heat-related injuries  
19 and illnesses increase workers' compensation costs  
20 and medical expenses.

21                         (11) The costs of lower labor productivity under  
22 rising temperatures is estimated to reach up to  
23 \$160,000,000,000 in lost wages per year in the  
24 United States by 2090 according to the 2018 Na-  
25 tional Climate Assessment. The drop in productivity

1       decreases income for employers and workers. Global  
2       gross domestic product losses from heat are pro-  
3       jected to be greater than 20 percent by the end of  
4       this century.

5                 (12) Every year, thousands of workers become  
6       sick and some die from exposure to heat. Between  
7       1992 and 2017, 815 United States workers died  
8       from heat and almost 70,000 were seriously injured.  
9       These numbers are generally understood to be gross  
10      undercounts because many heat-related illnesses and  
11      deaths are blamed on natural causes.

12                (13) Workers have a legal right to a safe work-  
13       place. The vast majority of heat-related workplace  
14       deaths and illnesses can be prevented by access to  
15       water, rest, and shade. Many employers don't pro-  
16       vide these simple measures for workers according to  
17       the Occupational Safety and Health Administration.

18                (14) Employers often retaliate against employ-  
19       ees if they report or seek assistance due to problems  
20       with heat. Many employees are therefore afraid to  
21       report problems and face increased risk of heat-re-  
22       lated illnesses or death.

23                (15) In the absence of a Federal standard, mul-  
24       tiple branches of the United States Armed Forces—  
25       including the Army, Navy, Marine Corps, and Air

1 Force—have issued heat prevention guidelines, and  
2 several States—California, Washington, and Min-  
3 nesota—have issued heat prevention standards. The  
4 National Institute for Occupational Safety and  
5 Health (“NIOSH”) issued criteria for such a stand-  
6 ard in 1972, updating it in 1986 and 2016.

7 (16) Congress created the Occupational Safety  
8 and Health Administration to ensure safe and  
9 healthful working conditions by setting and enfore-  
10 ing standards pursuant to section 6 of the Occupa-  
11 tional Safety and Health Act of 1970 (29 U.S.C.  
12 655). Employees are exposed to grave danger from  
13 exposure to excessive heat. The Occupational Safety  
14 and Health Administration must develop a standard  
15 to protect workers from the significant risks of heat-  
16 related illness and death.

17 **SEC. 2. OSHA SAFETY STANDARD FOR EXPOSURE TO HEAT  
18 AND HOT ENVIRONMENTS.**

19 (a) PROPOSED STANDARD.—Not later than 2 years  
20 after the date of enactment of this Act, the Secretary  
21 shall, pursuant to section 6(b) of the Occupational Safety  
22 and Health Act of 1970 (29 U.S.C. 655(b)), promulgate  
23 a proposed standard on prevention of occupational expo-  
24 sure to excessive heat.

1       (b) FINAL STANDARD.—Not later than 42 months  
2 after the date of enactment of this Act, the Secretary shall  
3 promulgate a final standard on prevention of occupational  
4 exposure to excessive heat that shall—

5                 (1) provide no less protection than the most  
6 protective heat prevention standard adopted by a  
7 State plan that has been approved by the Secretary  
8 under section 18 of the Occupational Safety and  
9 Health Act of 1970 (29 U.S.C. 667) and, at a min-  
10 imum, include the requirements described in section  
11 3; and

12                 (2) be effective and enforceable in the same  
13 manner and to the same extent as any standard pro-  
14 mulgated under section 6(b) of the Occupational  
15 Safety and Health Act of 1970 (29 U.S.C. 655(b)).

16       (c) INTERIM FINAL STANDARD.—

17                 (1) IN GENERAL.—If the proposed standard de-  
18 scribed in subsection (a) is not promulgated within  
19 2 years after the date of enactment of this Act, the  
20 Secretary shall promulgate an interim final standard  
21 on prevention of occupational exposure to excessive  
22 heat not later than 2 years and 60 days after such  
23 date of enactment—

24                         (A) to require covered employers to develop  
25 and implement a comprehensive workplace ex-

1           cessive heat prevention plan to protect covered  
2           employees from excessive heat that may lead to  
3           heat-related injuries and illnesses; and

4                 (B) that shall, at a minimum—

5                     (i) provide no less protection than the  
6                     most protective heat prevention standard  
7                     adopted by a State plan that has been ap-  
8                     proved by the Secretary under section 18  
9                     of the Occupational Safety and Health Act  
10                    of 1970 (29 U.S.C. 667);

11                     (ii) establish requirements for covered  
12                    employers with respect to—

13                             (I) exposure limits that trigger  
14                             action to protect covered employees  
15                             from heat-related illness;

16                             (II) hydration;

17                             (III) scheduled and paid rest  
18                             breaks in shaded or climate-controlled  
19                             spaces;

20                             (IV) an acclimatization plan;

21                             (V) exposure monitoring, and  
22                             other measures to prevent exposure to  
23                             heat above safe limits;

24                             (VI) covered employee and super-  
25                             visor training;

(VII) hazard notification;

(VIII) an emergency medical response plan;

(IX) heat-related surveillance recordkeeping; and

(X) procedures for compensating covered employees paid on a piece rate basis for required heat-related rest breaks;

(iii) take into consideration the Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments published by the National Institute for Occupational Safety and Health in 2016; and

(iv) include a requirement to protect covered employees of covered employers from discrimination or retaliation for exercising the rights of covered employees under the interim final standard.

1                             (A) The requirements applicable to occupa-  
2                             tional safety and health standards under section  
3                             6(b) of the Occupational Safety and Health Act  
4                             of 1970 (29 U.S.C. 655(b)).

5                             (B) The requirements of section 553(c) of  
6                             chapter 5 and chapter 6 of title 5, United  
7                             States Code.

8                             (C) The requirements of the National En-  
9                             vironmental Policy Act of 1969 (42 U.S.C.  
10                             4321 et seq.).

11                             (3) EFFECTIVE DATE OF INTERIM STAND-  
12                             ARD.—The interim final standard shall—

13                             (A) take effect on a date that is not later  
14                             than 30 days after the promulgation of such  
15                             standard, except that such interim final stand-  
16                             ard may include a reasonable phase-in period  
17                             for the implementation of required engineering  
18                             controls that take effect after such date;

19                             (B) be enforced in the same manner and  
20                             to the same extent as any standard promul-  
21                             gated under section 6(b) of the Occupational  
22                             Safety and Health Act of 1970 (29 U.S.C.  
23                             655(b)); and

(C) be in effect until the final standard described in subsection (b) becomes effective and enforceable.

4 SEC. 3. REQUIREMENTS FOR FINAL STANDARD ON PRE-  
5 VENTION OF OCCUPATIONAL EXPOSURE TO  
6 EXCESSIVE HEAT.

7       (a) IN GENERAL.—The final standard promulgated  
8 under section 2(b) shall, at a minimum—

19 (B) hydration:

(C) scheduled and paid rest breaks in shaded or climate-controlled spaces;

(D) an acclimatization plan;

(E) exposure monitoring, and other measures to prevent exposure to heat above safe limits;

13           (b) REQUIREMENTS.—The final standard promul-  
14 gated under section 2(b) shall, with respect to covered em-  
15 ployers, include the following:

16 (1) HEAT ILLNESS PREVENTION PLANS.—

1                   tives (including collective bargaining rep-  
2                   resentatives) of such covered employees;

3                   (ii) be tailored and specific to hazards  
4                   in the covered workplace;

5                   (iii) be in writing, in English and in  
6                   the language understood by a majority of  
7                   such covered employees, if such language is  
8                   not English; and

9                   (iv) be made available, upon request,  
10                  to such covered employees, representatives  
11                  (including collective bargaining representa-  
12                  tives) for such covered employees, and the  
13                  Secretary.

14                  (B) PLAN CONTENT.—Each plan required  
15                  under subparagraph (A) shall include proce-  
16                  dures and methods for the following:

17                  (i) Initial and regular monitoring of  
18                  covered employee exposure to determine  
19                  whether covered employees are exposed to  
20                  excessive heat.

21                  (ii) Provision of water, paid rest  
22                  breaks, and access to shade or cool-down  
23                  areas.

24                  (iii) Emergency response.

25                  (iv) Acclimatization.

(v) Hazard prevention applying principles of the industrial hygiene hierarchy of controls of the National Institute for Occupational Safety and Health, including, as appropriate—

(I) engineering controls that may include isolation of hot processes, isolation of covered employees from sources of heat, local exhaust ventilation, shielding from a radiant heat source, insulation of hot surfaces, and the provision of air conditioning, cooling fans (including cooling mist fans), evaporative coolers, and natural ventilation;

(II) administrative controls that limit exposure to a hazard by adjustment of work procedures or work schedules, which may include acclimatizing covered employees, rotating covered employees, scheduling work earlier or later in the day, using work-rest schedules, reducing work intensity or speed, changing required work clothing, and using relief workers; and

(III) personal protective equipment which may include water-cooled garments, air-cooled garments, reflective clothing, and cooling vests.

5 (vi) Coordination of risk assessment  
6 efforts, plan development, and implementa-  
7 tion of the plan with other employers who  
8 have covered employees who work at the  
9 covered workplace.

10 (vii) Compensating covered employees  
11 paid on a piece rate basis for required  
12 heat-related rest breaks.

## (2) TRAINING AND EDUCATION.—

(iv) Different types of heat illness



1                   that predictably compromise the safety of  
2                   the covered employee.

3                   (iii) The procedures to follow when a  
4                   covered employee exhibits signs or reports  
5                   symptoms consistent with possible heat ill-  
6                   ness, including emergency response proce-  
7                   dures.

8                   (C) GENERAL TRAINING REQUIRE-  
9                   MENTS.—The education and training provided  
10                  under this paragraph to covered employees of  
11                  the covered employer shall meet the following:

12                  (i) In the case of such a covered em-  
13                  ployee whose job circumstances have  
14                  changed, within a reasonable timeframe  
15                  after such change of job circumstances,  
16                  education and training shall be provided  
17                  that shall be—

18                   (I) in addition to the education  
19                  and training provided under clause  
20                  (ii), subparagraph (A), and, if applica-  
21                  ble to such covered employee, sub-  
22                  paragraph (B); and

23                   (II) applicable to such change of  
24                  job circumstances.

15 (v) The education and training shall  
16 be appropriate in content and vocabulary  
17 to the language, educational level, and lit-  
18 eracy of such covered employees.

21 (A) maintain at all times—

(i) records related to each plan of the covered employer under paragraph (1), including heat illness risk and hazard assess-

3 (ii) data on all heat-related illnesses  
4 and deaths; and

(iii) data on environmental and physiological measurements related to heat; and

(B) make such records and data available,

8           upon request, to covered employees and their  
9           representatives (including collective bargaining  
10          representatives) for examination and copying in  
11          accordance with section 1910.1020 of title 29,  
12          Code of Federal Regulations (as such section is  
13          in effect on the date of enactment of this Act).

14 (4) WHISTLEBLOWER PROTECTIONS.—

(B) PROHIBITION.—No covered employer shall discriminate or retaliate against any covered employee for—

10 (ii) exercising any other rights of the  
11 covered employee under this Act.

## 17 SEC. 4. DEFINITIONS.

18 In this Act:

19                             (1) COVERED EMPLOYEE.—The term “covered  
20                             employee” includes an individual employed by a cov-  
21                             ered employer.

(A) means an employer that employs an individual to work at a covered workplace; and

(B) includes a contractor, subcontractor, a temporary service firm, or an employee leasing entity.

7                     (4) EMPLOYER.—The term “employer” has the  
8                     meaning given the term in section 3 of the Occupa-  
9                     tional Safety and Health Act of 1970 (29 U.S.C.  
10                    652).

11                             (5) EXCESSIVE HEAT.—The term “excessive  
12 heat” includes outdoor or indoor exposure to heat at  
13 levels that exceed the capacities of the body to main-  
14 tain normal body functions and may cause heat-re-  
15 lated injury, illness, or fatality (including heat  
16 stroke, heat exhaustion, heat syncope, heat cramps,  
17 or heat rashes).

18                   (6) SECRETARY.—The term “Secretary” means  
19                   the Secretary of Labor.

